

What is claimed is:

1. A compound 8 to 80 nucleobases in length targeted to a coding region of a nucleic acid molecule of SEQ ID NO:4 encoding human histone deacetylase 2, wherein said compound specifically hybridizes with said region and inhibits the expression of human histone deacetylase 2.

2. The compound of claim 1 which is an antisense oligonucleotide.

3. The compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified internucleoside linkage.

4. The compound of claim 3 wherein the modified internucleoside linkage is a phosphorothioate linkage.

5. The compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified sugar moiety.

6. The compound of claim 5 wherein the modified sugar moiety is a 2'-O-methoxyethyl sugar moiety.

7. The compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified nucleobase.

8. The compound of claim 7 wherein the modified nucleobase is a 5-methylcytosine.

9. The compound of claim 2 wherein the antisense oligonucleotide is a chimeric oligonucleotide.

10. A composition comprising the compound of claim 1 and a pharmaceutically acceptable carrier or diluent.

11. The composition of claim 10 further comprising a colloidal dispersion system.

12. The composition of claim 10 wherein the compound is an antisense oligonucleotide.

13. A method of inhibiting the expression of histone deacetylase 2 in cells or tissues comprising contacting said cells or tissues with the compound of claim 1 so that expression of histone deacetylase 2 is inhibited.